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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/865,458	05/29/2001	Jin Soo Lee	LGE-007	3750
34610	7590	05/03/2006	EXAMINER	
FLESHNER & KIM, LLP P.O. BOX 221200 CHANTILLY, VA 20153			BASOM, BLAINE T	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/865,458	Applicant(s) LEE ET AL.	
	Examiner Blaine Basom	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,17-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10,17-20 and 22-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 May 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/10/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Response to Arguments***

The Examiner acknowledges the Applicants' amendments to claims 10 and 17-20, and the Applicants' addition of new claims 22-24. In response to these amendments, the objections presented in the previous Office Action regarding claims 10 and 19 are withdrawn, as is the 35 U.S.C. 112, second paragraph, rejection of claim 17.

Regarding claim 10, the Applicants argue that Cannon (U.S. Patent No. 6,044,365 to Cannon et al.), presented in the previous Office Action, fails to teach identifier codes, whereby different expressions relating to the same object are assigned the same identifier code, as is claimed. The Examiner respectfully disagrees with this argument. As more fully described below, Cannon explicitly teaches a thesaurus file which comprises an array of keywords, i.e. "thesaurus items," and for each keyword, the thesaurus file comprises one or more associated "entity identifiers," which ultimately identify the multimedia entity to which each keyword is associated (for example, see figures 5 and 7; and their associated description in column 5, line 3 – column 6, line 1, and column 6, line 31 – column 7, line 49). Such an entity identifier, being maintained on a computer, is necessarily maintained as code, e.g. in binary form. Accordingly, such an entity identifier is considered an "identifier code," like recited in the claimed invention.

Further regarding claim 10, the Applicants argue that Cannon does not teach "comparing identifier codes of the provided table with a stored preference information table including identifier codes and expressions for object data in which each expression has a corresponding identifier code and in which different expressions relating to the same object data are assigned the same identifier code," and "updating the preference information table if the identifier codes

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are different,” as is claimed. The Examiner respectfully disagrees for the reasons presented in the following rejection.

Regarding claim 17, the Applicants further argue that Sumita (U.S. Patent No. 6,581,207 to Sumita et al.) and Cannon fail to teach “providing an object data expression information table from a content description information constructor in a server to a preference information constructor in a client when the preference information constructor and the content description information constructor do not own jointly an object data expression information table of the same content,” as is claimed. The Examiner respectfully disagrees for the reasons presented in the following rejection. Sumita teaches providing an electronic programming guide from a server to a client. Cannon teaches that a thesaurus file may be associated with such multimedia content. That is, Sumita and Cannon, in combination, teach providing an object data expression information table, i.e. a thesaurus file, from a server to a client, as is more fully described below.

Regarding each of claims 18-20 and 22-24, the Applicants generally argue that neither Sumita nor Cannon teaches or suggests the claimed features. The Examiner respectfully disagrees, however, for the reasons presented in the following rejection.

The Applicants’ arguments have therefore been fully considered, but are not persuasive.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 10, 17-20, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,581,207, which is attributed to Sumita et al. (and hereafter referred to as “Sumita”), and also over U.S. Patent No. 6,044,365, which is attributed to Cannon et al. (and hereafter referred to as “Cannon”). In general, Sumita describes an “information filtering system” for presenting multimedia programs to a user according to the user’s personal tastes (see column 1, line 59 – column 2, line 34). The user’s taste in programs is maintained via a “user profile,” and is mapped against content description information in order to ascertain multimedia programs of interest to the user (see column 2, lines 22-34). Specifically, an “information filtering unit” performs this mapping (see column 2, lines 22-34). Thus Sumita describes, in a user adaptive multimedia system reflecting user preference information extracted from user history information, an apparatus, namely an information filtering unit, which is for mapping data for an efficient matching between user preference information and content description information.

Specifically regarding claim 10, Sumita describes a server system, called a “broadcasting station,” which is for transmitting an electronic program guide having information about multimedia program data to be serviced to a user (for example, see column 4, lines 36-50). Sumita also describes a client system, specifically an “information filtering unit,” which maps

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object data by receiving content description information transmitted from the server system, namely the electronic program guide, and performs matching between the content description information and user preference information extracted from user history information regarding prior multimedia programs (see column 4, lines 36-67; and column 6, lines 22-56). Particularly, the information filtering unit performs this mapping by using keywords maintained in the user's profile to find relevant programs in the electronic program guide (see column 6, lines 22-56). This information filtering unit thus obtains user preference information regarding programs described in the received electronic program guide and reflects the gotten user preference information to a multimedia system, specifically video equipment on the user's side (for example, see column 4, lines 36-67). Sumita, however, does not explicitly disclose that the server transmits to the client a table including identifier codes and expressions for object data included in content description information of multimedia data in which each expression has a corresponding identifier code and in which different expressions relating to the same object data are assigned the same identifier code, whereby as expressed in claim 10, a similar table already existing on the client system is compared with this table in order to update the client's table.

Like Sumita, Cannon presents a system used to access and present multimedia data according to a user's preference. Specifically, both Sumita and Cannon disclose that one or more keywords are used to search for and identify multimedia content satisfying user preference information (see column 6, lines 22-56 of Sumita; and column 2, lines 62-67 of Cannon). Regarding this use of keywords to identify multimedia content, Cannon describes a problem, stating that although various expressions usually identify the same multimedia content, only one keyword is accepted to search for and access the multimedia content; meaning that the exact

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keyword must be known to identify the content (see column 3, lines 33-65). Cannon remedies this problem with a thesaurus file comprising a plurality of expressions, whereby each expression in the thesaurus is linked to one or more “referent sets,” and whereby each referent set is in turn linked to a multimedia entity (see column 4, lines 39-65; and column 6, line 31 – column 7, line 49). A single referent set associates synonyms, metonyms, misspellings, and foreign language equivalents into a single set identifying a multimedia data entity to be retrieved. One of a plurality of possible expressions, each referring to the same content, is thus used to determine and access the content. Specifically, in order to retrieve a multimedia entity, an expression describing the entity is input and then found in the thesaurus, whereby the referent set or sets comprising the word are ascertained, thus identifying the related multimedia entities (see column 7, line 65 – column 8, line 21). The thesaurus file therefore comprises an array of expressions, i.e. “thesaurus items,” and for each expression, the thesaurus file comprises one or more associated “entity identifiers,” which ultimately identify the multimedia entity to which the expression is associated (for example, see figures 5 and 7; and their associated description in column 5, line 3 – column 6, line 1, and column 6, line 31 – column 7, line 49). It is understood that two expressions may be associated with the same entity identifier (for example, see figure 5). Such an entity identifier, being maintained on a computer, is necessarily maintained as code, e.g. in binary form. Accordingly, such an entity identifier is considered an “identifier code,” like recited in the claimed invention. The thesaurus file of Cannon is therefore considered a “table including identifier codes and expressions for object data included in content description information of multimedia data in which each expression as a corresponding identifier code and

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in which different expressions relating to the same object data are assigned the same identifier code,” like recited in the claimed invention.

It would have been obvious to one of ordinary skill in the art, having the teachings of Sumita and Cannon before him at the time the invention was made, to modify the system taught by Sumita such that, along with the electronic program guide, the information filtering unit additionally receives a thesaurus file, like that described by Cannon, the thesaurus file being used to reference programs in the electronic program guide by keywords in the user’s profile. It would have been advantageous to one of ordinary skill to utilize such a combination because a thesaurus file provides for a more accurate determination of media, given a keyword, as is taught by Cannon. Thus with this combination of Sumita and Cannon, a thesaurus file is sent from a server to a client system. It is understood that a thesaurus file already existing on the client system (i.e. the previous thesaurus file delivered) is necessarily either overridden or augmented by the new thesaurus file. In terms of being augmented, the two thesaurus files are necessarily compared and the previous thesaurus file is updated to include new entity identifiers, i.e. identifier codes, for multimedia programs not previously referenced by the thesaurus file. In other words, the method taught by Sumita and Cannon necessarily involves: providing, from a server to a client, a table, i.e. thesaurus file, including identifier codes and expressions for object data included in content description information of multimedia data in which each expression has a corresponding identifier code and in which different expressions relating to the same object data are assigned the same identifier code; comparing identifier codes of the provided table with a stored preference information table, i.e. thesaurus, including identifier codes and expressions for object data in which each expression has a corresponding identifier code and in which

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different expressions relating to the same object data are assigned the same identifier code; and updating the preference information table of the client with information in the provided table if the identifier codes of the tables are different, as is recited in claim 10.

As per claim 17, the above-described combination of Sumita and Cannon teaches: providing an object data expression information table, i.e. a thesaurus file, from a content description information constructor, i.e. a server, to a preference information constructor, i.e. a client, when the preference information constructor and the content description information constructor do not jointly own an object data expression information table of the same content in comparing and updating of content information between the preference information constructor and the content description information constructor; and updating a preference information table, i.e. an outdated thesaurus file, of the preference information constructor by using information of the provided object data expression information table after comparing the preference information table and the provided object data expression information table, wherein updating the preference information table comprises updating the preference information table by the preference information constructor by comparing the table provided from the content description information constructor with the preference information table of the preference information constructor, as is claimed.

Concerning claim 18, the above-described combination of Sumita and Cannon further teaches that updating the client's thesaurus involves: generating a table, i.e. a thesaurus file, including identifier codes each corresponding to object data, i.e. multimedia programs having various associated expressions for expressing the object data, by a content information

constructor, i.e. server; and providing the table generated from the content information constructor to a preference information constructor, i.e. a client, as is claimed.

Concerning claim 19, the above-described combination of Sumita and Cannon further teaches: generating a table, i.e. a thesaurus file, including identifier codes for expressing at least one object data of the same content, i.e. multimedia programs, and representative expressions by the identifier codes by a content information constructor, i.e. server; and providing the table generated from the content information constructor to a preference information constructor, i.e. a client; and updating the preference information table to map a same identifier code to different expressions of object data having a same content based on the table provided from the content description information constructor, as is claimed.

As per claim 20, the above-described combination of Sumita and Cannon further teaches: providing direct information stored in a content description information constructor, i.e. information within a thesaurus file within a server, to a preference information constructor, i.e. a client, as a lookup table format when the preference information constructor and the content description information constructor do not jointly own an object data expression information table of the same content in comparing and updating of content information of the preference information constructor and the content description information constructor; transforming the direct information of the lookup table into identifier codes by comparing content information of the preference information constructor and the content description constructor; and updating a preference information table by the preference information constructor after comparing identifier codes stored in the preference information table and the transformed identifiers, wherein the preference information table includes the identifier codes and expressions for object data in

which each expression has a corresponding identifier code and in which different expressions relating to the same object data are assigned the same identifier code, as is claimed.

Concerning claims 22-24, Sumita teaches using keywords within a user profile to identify broadcast programs to be viewed on a television or other display device, as is described above. That is, the keywords are representative of, and correspond to, broadcast programs of interest to the user. Cannon further teaches that such keywords may be organized within a table in order to identify multimedia content that may be expressed in various different ways. That is, the thesaurus file of Cannon, as used as described above to identify broadcast programs that may be expressed in different ways, necessarily comprises expressions, i.e. keywords, which are representative of, and correspond to, the broadcast programs.

Conclusion

Applicant's amendment necessitated any new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Blaine Basom whose telephone number is (571) 272-4044. The examiner can normally be reached on Monday through Friday, from 8:30 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

btb
5/1/2006


TADESSE HAILU
Patent Examiner